	In re Application of  STAMES D. PAVLEY	
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asnington, DC 20231  preby request access unden 37 CFR 1.14 ntified ABANDONED application, which is (A) referred to in United States Patent N (B) referred to in an application that is of Application No.  paper number  (C) an application that claims the bases	Number 488557/  Pipen to public inspection as se	t forth in 37 CFR 1.11, i.e.
reby request access under 37 CFR 1.14 miffed ABANDONED application, which is (A) referred to in United States Patent II.  (B) referred to in an application that is on Application No.  paper number  (C) an application that claims the benefit inspection, I.e., Application No.  (D) an application in which the applicant application to the public.	Number 48857/  Popen to public inspection as se , filed  It of the filing date of an application as se	t forth in 37 CFR 1.11, i.e. on page of

Morton Signature

ROSENBERG MORTON

Typed or printed name

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## United States Patent [19]

Pauley et al.

Patent Number: · [11]

Mirm. 6 page brochure, (1985).

4,885,571

Date of Patent: [45]

Dec. 5, 1989

[54] TAG FOR USE WITH PERSONNEL MONITORING SYSTEM

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[21] Appl. No.: 231,823

[22] Filed: Aug. 12, 1988 Meyer, "Crime Determent Transponder System"; IEEE Transactions on Aerospace and Electronic Systems; pp.

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(List continued on next page.)

Related U.S. Application Data

Continuation of Ser. No. 252,831, Apr. 15, 1986, abo [63] Int. CL GOER 23/00; HO4B 1/34. U.S. a 340/573; 340/514; 340/825.49; 455/100 [58] Field of Search . 340/572-576, 340/514-516, 539, 825,49; 455/100

[56]

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ABSTRACT

A tag for use with an individual monitoring system. The tag is worn by an individual being monitored, preferably on the ankle or leg where it can be concealed by the clothing of the individual. The tag is fully self contained and scaled. The circuits of the tag periodically generate an identification signal that includes an identication code. The identification signal modulates a stable RF signal that is transmitted in bursts of data words to a receiver associated with a field monitoring device (FMD) located at the menitoring location. In turn, the FMD may randomly establish communication with a central processing unit (CPU) located at a central monitoring location. Other information is included in the sientification code of the tag, such as information indicating that an attempt has been made to remove the tag from the individual. The tag is held in place near the skin of it's wearer by a conductive strap that wraps around the leg or other limb of the individual. Two capacitive electrodes, one of which is realized with the conductive strap, function as the plates of a capacitor, with the body flesh serving as the dielectric material therebetween. By monitoring an alternating signal coupled from one capacitive electrode to the other, a determination can be made as to whether the tag has reanimed near the body flesh. Further, because the strap is conductive, a signal can be passed therethrough and a determination can be made as to whether the strap has been broken.

16 Claims, 6 Drawing Sheets

